Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: Distributed eLearning Solution Implementation   **Project ID: D50162EL**

Leadership Group: Finance/Administration		
Department: Health & Human Services	**Division:** Health	
Project Sponsor: Sara Stoddard	**Date Requested:** 2/10/2020	**PM Customer No.** 162
Request Type: _**New Development**_		
IT Team Name: Public & Environmental Services	**IT Team No:** 5	
Project Manager/Leader: Stu Smith		
Account Number: 96842	**Account Description:** Health Administration	**Customer Name:** Health
Grant Funded? **No**	**Mandate?** **No** **Mandate Source:**	

Project Goal

To implement a system that allows Oakland County Health & Human Services Department and Friend of the Court staff to create and distribute online training regarding policy, procedures, requirements, and strategic plan efforts so that the system will allow participants to be tracked for compliance and documentation.

Business Objective

To implement an Online Learning solution that meets the requirements of the Health Department, Homeland Security, and Friend of the Court use cases including tracking participation and creation/distribution of training for both internal and public users.

Major Deliverables

- Detailed Project Plan
- Participate in creation of requirements document
- Participate in distribution RFP to potential vendors
- Develop and populate scoring matrix
- Implementation Plan
- Application and/or System Requirements
- Technical Architecture Diagram
- User Acceptance Test Plan
- Approved Tech Review of selected solution
- Contract with selected vendor
- Training/User Manual(s)
- Provide Training and support documentation
- Disaster Recovery Toolkit
- Service Center Knowledge Documents

Project Name: Distributed eLearning Solution Implementation   Project ID: D50162EL

Approach
- Develop Detailed Project Plan
- Implementation Plan
- Review current business process and conduct needs assessment with customer, ensuring current manual processes are refined and automated.
- Document system requirements
- Determine and document system architecture and diagram
- Conduct Tech Review
- Develop Implementation Plan
- Configure new system
- Develop User Acceptance Test Plan
- Test new system
- Acquire User Acceptance Sign off
- Conduct Change Control
- Develop User Documentation, Disaster Recovery Toolkit, Service Center Knowledge Documents
- Train users on new system
- Release new system into production

Research & Analysis

Gartner Research Recommendation

Gartner research recommendation includes the suggestion to compare a cross section of potential vendors specific to the top use cases and do not focus on the specific requirements of the sponsor. Additionally, that by searching for the option that provides the most benefit to the organization's broader needs, this will correlate to the users' top priorities and complement the learning foundation.

The solution to be obtained falls within the Leaning Management System and Learning Content Management System technology segments. The Learning Management System market is crowded with over 500 different point solutions.

Benefits

See Return on Investment (ROI) Analysis Document

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Project Name: Distributed eLearning Solution Implementation   Project ID: D50162EL

Impact

Number of Users   Health Division staff, Homeland Security Staff, FOC staff, community partners, and general public

Divisions   Health Division and Courts

Leadership Groups Finance/Administration

Risk

Business Environment   High – Project will dramatically change existing business processes or will negatively affect the business environment if implementation is unsuccessful.

Technical Environment   Medium – Previously implemented technologies with new aspects and/or new requirements

Assumptions

Staffing   IT Staffing: resources will be available for the hours indicated per the attached project plan.

Other Staffing: additional staffing will be available as follows:

Role:	Name	Hours per Day
Project Sponsor:	Sara Stoddard	As Needed
Project Stakeholder:	Thom Hardesty	As Needed
Project Stakeholder:	Suzanne Hollyer	As Needed

Facilities

-

Technical

- No data conversion is needed from the existing elearning system.

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Funding

-

Other

-

Priority

-

Constraints

-

Exclusions

- Workday excluded from consideration due to limitations in creating content in the application, converting file types, voiceover capability, audio integration, fade in ability, and scoring options. Additionally, members of the user base extends outside of Oakland County employees and contractors, to members of the public.

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Project Scope and Approach

Project Name: Distributed eLearning Solution Implementation   **Project ID: D50162EL**

PROJECT PHASE AUTHORIZATION

Phase(s): All		
Total Estimated Application Services	**Hours: 861**	
Total Estimated Technical Systems	**Hours: 52**	
Total Estimated CLEMIS	**Hours:**	
Total Estimated Internal Services	**Hours:**	
IT Application Services Division Manager Approval:		**Date:**
IT Technical Systems Division Manager Approval:		**Date:**
IT CLEMIS Division Manager Approval:		**Date:**
IT Internal Services Division Manager Approval:		**Date:**
IT Management Approval:		
Approved: Yes No		Date:
Reason:		
Project Sponsor Approval:		
Title:		Date:

PROJECT SUMMARY

Authorized Development (see above)	**Hours: 913**	
Preliminary Estimated Development for Future Phases	**Hours:**	
Grand Total Estimated Development	**Hours: 913**	**Cost: $150,645**

Oakland County
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Project Scope and Approach

Project Name: Distributed eLearning Solution Implementation   **Project ID: D50162EL**

PROJECT COMPLETION AUTHORIZATION

Customer Acceptance of Product:	
Title:	Date:
Project Office Review:	Date:

Distributed eLearning Solution Implementation - Size Estimate (+/- 10% to 50%)

	Type	ID	Task Name	Estimated	Estimate Notes
1				Hours	
2					
3	Phase	000000	PROJECT MANAGEMENT	238	
4	Phase	100000	DEVELOP RFP & SELECT VENDOR	206	
5	Phase	200000	DEFINE BUSINESS REQUIREMENTS	102	
6	Phase	300000	DESIGN SYSTEM ARCHITECTURE	73	
7	Phase	400000	IMPLEMENT VENDOR APPLICATION	160	
8	Phase	500000	IMPLEMENTATION PHASE	84	
9	Phase	600000	POST IMPLEMENTATION SUPPORT	50	
10				913	

Oakland County -- Distributed eLearning Solution Implementation

Return on Investment Analysis

Project Summary

Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Benefits/Savings:							
Tangible Benefits Subtotal:	0	0	0	0	0	0	0
Cost Avoidance Subtotal:	72,318	72,826	73,339	73,857	74,381	74,910	441,631
Costs:							
Development Services Subtotal:	177,245	13,332	6,733	13,600	6,868	13,873	231,651
Hardware Subtotal:	0	0	0	0	0	0	0
Software Subtotal:	27,800	7,800	7,800	7,800	7,800	7,800	66,800
Infrastructure Subtotal	0	0	0	0	0	0	0
Training Subtotal:	0	0	0	0	0	0	0
Other Subtotal:	0	0	0	0	0	0	0
Annual Statistics:							
Annual Total Savings	72,318	72,826	73,339	73,857	74,381	74,910	441,631
Annual Total Costs	205,045	21,132	14,533	21,400	14,668	21,673	298,451
Annual Return on Investment	(132,727)	51,694	58,806	52,457	59,713	53,236	143,180
Annual Costs/Savings Ratio	283.53%	29.02%	19.82%	28.97%	19.72%	28.93%	
Project Cumulative Statistics:							
Cumulative Total Savings	72,318	145,143	218,482	292,340	366,721	441,631	441,631
Cumulative Total Costs	205,045	226,177	240,710	262,110	276,778	298,451	298,451
Cumulative Return on Investment	(132,727)	(81,034)	(22,227)	30,230	89,943	143,180	143,180
Cumulative Cost/Savings Ratio	283.53%	155.83%	110.17%	89.66%	75.47%	67.58%	67.58%
Year Positive Payback Achieved				Year 4			Year 4
State or Federal Mandate?							
Signatures:							
Benefits Reviewed By Project Sponsor				Date:			
Costs (including IT Resources) Reviewed By Information Technology Project Manager				Date:			

Oakland County -- Distributed eLearning Solution Implementation

Return on Investment Analysis

Savings Detail

Benefit/Savings Description	Project Savings Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Savings	Annual Multiplier
Reduced expense for contracted trainers to provide content to our staff using train-the-trainer concepts.	Cost Avoidance		EA	2	10,000	20,000	
Reduced staff effort to become a trainer and then provide courses at several sessions to ensure all 384 staff receive consistent training materials.	Cost Avoidance		HR	120	39	4,708	1.010
Reduced time for staff to input and track compliance with required trainings.	Cost Avoidance		HR	120	28	3,360	1.010
Provide consistent training to ensure accurate messages are related.	Intangible Benefit					0	
Allow staff the opportunity to build trainings specific to Oakland County's policies and procedures.	Intangible Benefit					0	
Allows Homeland Security staff to better track and manage training participation.	Intangible Benefit					0	
Time spent by HSD staff tracking emails training participation.	Cost Avoidance		HR	300	65	19,500	1.010
Time spent by HSD staff taking telephone calls from people to register for classes.	Cost Avoidance		HR	400	50	20,000	1.010
Time spent by HSD staff printing training materials.	Cost Avoidance		HR	50	65	3,250	1.010
Printing and purchase of training materials.	Cost Avoidance		ANN	1,500	1	1,500	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	

Oakland County -- Distributed eLearning Solution Implementation

Return on Investment Analysis

Savings Detail

Benefit/Savings Description	Project Savings Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Savings	Annual Multiplier
						0	
						0	
						0	
						0	
						0	

Oakland County -- Distributed eLearning Solution Implementation

Return on Investment Analysis

Savings Detail

Benefit/Savings Description	Project Savings Category	Affects Project ROI? Y1	Y2	Y3	Y4	Y5	Y6	Potential Savings Extensions Y1	Y2	Y3	Y4	Y5	Y6
Reduced expense for contracted trainers to provide content to our staff using train-the-trainer concepts.	Cost Avoidance	X	X	X	X	X	X	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000
Reduced staff effort to become a trainer and then provide courses at several sessions to ensure all 384 staff receive consistent training materials.	Cost Avoidance	X	X	X	X	X	X	4,707.60	4,754.68	4,802.22	4,850.24	4,898.75	4,948
Reduced time for staff to input and track compliance with required trainings.	Cost Avoidance	X	X	X	X	X	X	3,360.00	3,393.60	3,427.54	3,461.81	3,496.43	3,531
Provide consistent training to ensure accurate messages are related.	Intangible Benefit												
Allow staff the opportunity to build trainings specific to Oakland County's policies and procedures.	Intangible Benefit												
Allows Homeland Security staff to better track and manage training participation.	Intangible Benefit												
Time spent by HSD staff tracking emails training participation.	Cost Avoidance	x	x	x	x	x	x	19,500.00	19,695.00	19,891.95	20,090.87	20,291.78	20,495
Time spent by HSD staff taking telephone calls from people to register for classes.	Cost Avoidance	x	x	x	x	x	x	20,000.00	20,200.00	20,402.00	20,606.02	20,812.08	21,020
Time spent by HSD staff printing training materials.	Cost Avoidance	x	x	x	x	x	x	3,250.00	3,282.50	3,315.33	3,348.48	3,381.96	3,416
Printing and purchase of training materials.	Cost Avoidance	x	x	x	x	x	x	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500

Oakland County -- Distributed eLearning Solution Implementation

Return on Investment Analysis

Savings Detail

Benefit/Savings Description	Project Savings Category	Affects Project ROI?						Potential Savings Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6	Y1	Y2	Y3	Y4	Y5	Y6

Oakland County -- Distributed eLearning Solution Implementation

Return on Investment Analysis

Savings Summary

Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Tangible Benefit:							
Tangible Benefits Subtotal:							
Cost Avoidance:							
Reduced expense for contracted trainers to provide content to our staff using train-the-trainer concepts.	20,000	20,000	20,000	20,000	20,000	20,000	120,000
Reduced staff effort to become a trainer and then provide courses at several sessions to ensure all 384 staff receive consistent training materials.	4,708	4,755	4,802	4,850	4,899	4,948	28,961
Reduced time for staff to input and track compliance with required trainings.	3,360	3,394	3,428	3,462	3,496	3,531	20,671
Time spent by HSD staff tracking emails training participation.	19,500	19,695	19,892	20,091	20,292	20,495	119,964
Time spent by HSD staff taking telephone calls from people to register for classes.	20,000	20,200	20,402	20,606	20,812	21,020	123,040
Time spent by HSD staff printing training materials.	3,250	3,283	3,315	3,348	3,382	3,416	19,994
Printing and purchase of training materials.	1,500	1,500	1,500	1,500	1,500	1,500	9,000
Cost Avoidance Subtotal:	*72,318*	*72,826*	*73,339*	*73,857*	*74,381*	*74,910*	*441,631*
Intangible Benefit:							
Provide consistent training to ensure accurate messages are related.							
Allow staff the opportunity to build trainings specific to Oakland County's policies and procedures.							
Allows Homeland Security staff to better track and manage training participation.							
Savings Total:	*72,318*	*72,826*	*73,339*	*73,857*	*74,381*	*74,910*	*441,631*

Oakland County -- Distributed eLearning Solution Implementation

Date: 06/15/2020

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Affects Project ROI?					
								Y1	Y2	Y3	Y4	Y5	Y6
IT Hours - New Development	Development Svcs			913	165	150,645		x					
IT Hours - System Maintenance	Development Svcs			20	165	3,300	1.010	x	x	x	x	x	x
IT Hours - Customer Support	Development Svcs			20	165	3,300	1.010	x	x	x	x	x	x
IT Hours - Planned Maintenance	Development Svcs			40	165	6,600	1.010		x		x		x
User Hours - New Development	Development Svcs					0							
User Hours - PTNE/OT	Development Svcs					0							
Contractor Professional Services	Development Svcs			20,000	1	20,000		x					
PC System - Acquisition	Hardware				687	0							
PC System - Maintenance	Hardware				2,936	0							
Notebook - Acquisition	Hardware				1,115	0							
Notebook - Maintenance	Hardware				3,024	0							
Tablet Notebook - Acquisition	Hardware				1,421	0							
Tablet Notebook - Maintenance	Hardware				2,800	0							
Laserprinter - Acquisition	Hardware				1,432	0							
Laserprinter - Maintenance	Hardware				1,408	0							
PC Maintenance User Owned	Hardware				2,720	0							
Printer Maintenance User Owned	Hardware				1,264	0							
File Space (100GB)	Hardware		ANN		23	0							
Package Software - Acquisition	Software					0							
Package Software - Maintenance	Software			12	650	7,800		x	x	x	x	x	x
Business Objects Access	Software					0							
Term Emulation SFTW-Acquisition	Software					0							
Term Emulation SFTW-Maintenance	Software					0							
Server - Acquisition/Upgrade	Infrastructure				8,000	0							
Server - Maintenance	Infrastructure				360	0							
Server Sftwre - Acquisition/Upgrade	Infrastructure				335	0							
Server Sftwre - Maintenance	Infrastructure					0							
Server Rack Mount	Infrastructure				400	0							
Oracle Enterprise Per Processor - Includes Year 1 Maintenance	Infrastructure				21,372	0							
Oracle Enterprise Per Processor - Year 2 and Beyond	Infrastructure				3,432	0							
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure				24,533	0							

REV: May 21, 2018

Oakland County -- Distributed eLearning Solution Implementation

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Affects Project ROI?					
								Y1	Y2	Y3	Y4	Y5	Y6
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure				20,759	0							
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure				16,985	0							
SQL Server Enterprise - Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure				4,218	0							
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure				6,398	0							
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure				5,414	0							
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure				4,429	0							
SQL Server - Standard Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure				1,100	0							
Websphere Basic Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure				3,506	0							
Websphere Basic Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure				701	0							
Websphere ND Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure				13,180	0							
Websphere ND Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure				2,635	0							

Oakland County -- Distributed eLearning Solution Implementation

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Affects Project ROI?					
								Y1	Y2	Y3	Y4	Y5	Y6
SSL Certificate	Infrastructure				845	0							
Internet Access	Infrastructure				180	0							
Imperva Web Application Firewall (External Web Applications Only)	Infrastructure		ANN		500	0							
App Code Directories on Consolidated IIS Server (Virtual)	Infrastructure		ANN		415	0							
Database (5 GB) on Consolidated SQL Instance Server	Infrastructure		ANN		930	0							
Database Instance (125 GB DB) on Consolidated SQL Server	Infrastructure		ANN		2,395	0							
Database SQL Maint Server	Infrastructure		ANN		834	0							
Database SQL Server Physical	Infrastructure		ANN		19,158	0							
DB Maintenance (Annual Cycle $610)	Infrastructure		ANN		610	0							
DB Maintenance (Semi-Annual Cycle $1220)	Infrastructure		ANN		1,220	0							
DB Maintenance (Semi-Annual Cycle $2440)	Infrastructure		ANN		2,440	0							
Dedicated Virtual Server	Infrastructure		ANN		4,150	0							
DB Instance Setup	Infrastructure				976	0							
DBA MS SQL Database Creation on Exisitng Instance	Infrastructure				366	0							
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $601 On Premise Physical Server = N/A	Infrastructure		ANN			0							
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $951 On Premise Physical Server = $9,288	Infrastructure		ANN			0							
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $1,702 On Premise Physical Server = $9,751	Infrastructure		ANN			0							
Large - 16 Core 64GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $3,167 On Premise Physical Server = $10,446	Infrastructure		ANN			0							

Oakland County -- Distributed eLearning Solution Implementation

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Affects Project ROI?					
								Y1	Y2	Y3	Y4	Y5	Y6
Extra Large - 40 Core 160GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $7,564 On Premise Physical Server = $12,906	Infrastructure		ANN			0							

Oakland County -- Distributed eLearning Solution Implementation

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
IT Hours - New Development	Development Svcs	150,645.00					
IT Hours - System Maintenance	Development Svcs	3,300.00	3,333.00	3,366.33	3,399.99	3,433.99	3,468.33
IT Hours - Customer Support	Development Svcs	3,300.00	3,333.00	3,366.33	3,399.99	3,433.99	3,468.33
IT Hours - Planned Maintenance	Development Svcs		6,666.00		6,799.99		6,936.67
User Hours - New Development	Development Svcs						
User Hours - PTNE/OT	Development Svcs						
Contractor Professional Services	Development Svcs	20,000.00					
PC System - Acquisition	Hardware						
PC System - Maintenance	Hardware						
Notebook - Acquisition	Hardware						
Notebook - Maintenance	Hardware						
Tablet Notebook - Acquisition	Hardware						
Tablet Notebook - Maintenance	Hardware						
Laserprinter - Acquisition	Hardware						
Laserprinter - Maintenance	Hardware						
PC Maintenance User Owned	Hardware						
Printer Maintenance User Owned	Hardware						
File Space (100GB)	Hardware						
Package Software - Acquisition	Software						
Package Software - Maintenance	Software	7,800.00	7,800.00	7,800.00	7,800.00	7,800.00	7,800.00
Business Objects Access	Software						
Term Emulation SFTW-Acquisition	Software						
Term Emulation SFTW-Maintenance	Software						
Server - Acquisition/Upgrade	Infrastructure						
Server - Maintenance	Infrastructure						
Server Sftwre - Acquisition/Upgrade	Infrastructure						
Server Sftwre - Maintenance	Infrastructure						
Server Rack Mount	Infrastructure						
Oracle Enterprise Per Processor - Includes Year 1 Maintenance	Infrastructure						
Oracle Enterprise Per Processor - Year 2 and Beyond	Infrastructure						
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure						

Oakland County -- Distributed eLearning Solution Implementation

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Enterprise - Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure						
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server - Standard Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure						
Websphere Basic Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure						
Websphere Basic Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure						
Websphere ND Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure						
Websphere ND Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure						

Oakland County -- Distributed eLearning Solution Implementation

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
SSL Certificate	Infrastructure						
Internet Access	Infrastructure						
Imperva Web Application Firewall (External Web Applications Only)	Infrastructure						
App Code Directories on Consolidated IIS Server (Virtual)	Infrastructure						
Database (5 GB) on Consolidated SQL Instance Server	Infrastructure						
Database Instance (125 GB DB) on Consolidated SQL Server	Infrastructure						
Database SQL Maint Server	Infrastructure						
Database SQL Server Physical	Infrastructure						
DB Maintenance (Annual Cycle $610)	Infrastructure						
DB Maintenance (Semi-Annual Cycle $1220)	Infrastructure						
DB Maintenance (Semi-Annual Cycle $2440)	Infrastructure						
Dedicated Virtual Server	Infrastructure						
DB Instance Setup	Infrastructure						
DBA MS SQL Database Creation on Exisitng Instance	Infrastructure						
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $601 On Premise Physical Server = N/A	Infrastructure						
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $951 On Premise Physical Server = $9,288	Infrastructure						
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $1,702 On Premise Physical Server = $9,751	Infrastructure						
Large - 16 Core 64GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $3,167 On Premise Physical Server = $10,446	Infrastructure						

Oakland County -- Distributed eLearning Solution Implementation

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
Extra Large - 40 Core 160GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $7,564 On Premise Physical Server = $12,906	Infrastructure						

Oakland County -- Distributed eLearning Solution Implementation

Date: 06/15/2020

Return on Investment Analysis

Cost Summary

Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Development Services:							
IT Hours - New Development	150,645						150,645
IT Hours - System Maintenance	3,300	3,333	3,366	3,400	3,434	3,468	20,302
IT Hours - Customer Support	3,300	3,333	3,366	3,400	3,434	3,468	20,302
IT Hours - Planned Maintenance		6,666		6,800		6,937	20,403
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services	20,000						20,000
Development Services Subtotal:	***177,245***	***13,332***	***6,733***	***13,600***	***6,868***	***13,873***	***231,651***
Hardware:							
Hardware Subtotal:							
Software:							
Package Software - Maintenance	7,800	7,800	7,800	7,800	7,800	7,800	46,800
Contractor Professional Services	20,000						20,000
Software Subtotal:	***27,800***	***7,800***	***7,800***	***7,800***	***7,800***	***7,800***	***66,800***
Infrastructure:							
Infrastructure Subtotal							
Training:							
Training Subtotal:							
Other:							
Other Subtotal:							
Costs Total:	***205,045***	***21,132***	***14,533***	***21,400***	***14,668***	***21,673***	***298,451***

Oakland County -- Distributed eLearning Solution Implementation

Return on Investment Analysis

Assumptions

Date	Assumption Description
09-Mar-20	Supervsiors will provide the trainings with savings estimated by using level 14 spend.
09-Mar-20	Central Employee Records Coordinator would be expected to track compliance.
09-Mar-20	Homeland Security will only be tracking and managing course participation and registration. No online learning programs expected.
09-Mar-20	Assumes 5 users at Homeland Security. The system would allow public users to access and sign up, etc.
12-May-20	Homeland Security and Friend of Court will have external users.
08-Jun-20	Average monthly cost for 500 users is $650. (Gnosis, SkyPrep, Accord) - Implementation costs not available
11-Jun-20	Implementation services were estimated based on the average cost of the solutions. None of the vendors we called for information could share average implementation costs.